ABSTRACT OF THE DISCLOSURE

The present invention is to provide a spot-size transformer which can transform the beam spot-size in a waveguide separated by a groove and a waveguide-embedded optical circuit using the spot-size transformer.

The spot-size transformer according to the present invention comprises a first optical waveguide having a first core and a first cladding covering substantially the whole surface of the first core, a second optical waveguide having a second core provided as an extension of the first cladding and a second cladding, a transition waveguide positioned between the first and second optical waveguides, the transition waveguide having a first core whose width of the extension becomes gradually narrower as it goes toward the second optical waveguide.